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Woodard, Emhardt, Moriarty, McNett & Henry LLP
Bank One Center/Tower
Suite 3700
111 Monument Circle
Indianapolis, IN 46204-5137

EXAMINER

SMALLEY, JAMES N

ART UNIT

PAPER NUMBER

3727

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/602,905

Applicant(s)

HOFF, JAMES A.

Examiner

James N. Smalley

Art Unit

3727

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-9 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9, 13-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3727

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 8-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Bradshaw et al. US 4,105,135 in reference to Baughman US 5,971,189.

Bradshaw '135 teaches a closure plug (1) comprising a threaded body for receipt by a threaded flange (10), a radial flange (6), and a plurality of unitary axially-protruding projections (8) from an outer portion of the flange.

Art Unit: 3727

Regarding claim 1, Examiner notes the claim preamble is drawn to a closing plug for receipt by a threaded flange (emphasis added). The axially-protruding projections/scallops (8) of Bradshaw '135 are capable of being used in the intended manner, i.e. as abutments for limiting the threaded advancement of the plug by abutment against a surface of a drum end. For example, the closing plug of Bradshaw '135 could be applied to another threaded flange, such as that of Baughman US 5,971,189, whereby the projections would abut a surface of the drum end. In fact, it can be clearly seen in the cover figure of the Baughman '189 patent that a similarly-dimensioned axial projection abuts a drum surface, and prevents advancement. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Regarding claims 5 and 9, Examiner notes the flat surface is read to be the surface extending radially outwardly from the longitudinal axis, along the bottom edge of the curved flange (8). This surface is furthermore perpendicular to a longitudinal axis of the plug.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-5, 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradshaw et al. US 4,105,135.

Bradshaw '135 does not teach the radial flange having a modified hex-shape, or further having six projections. However, Bradshaw '135 does teach in col. 1, lines 38-42, the downwardly deformed scallops (8) are provided as actuating surfaces for the application of torque by hand engagement.

Art Unit: 3727

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the closure of Bradshaw '135, providing six projections, motivated by the benefit of increasing the number of points whereby a hand may engage the plug to provide opening torque.

Furthermore, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. The decision notes, "Combination cannot be patented unless it is synergistic, that is, results in effect greater than sum of several effects taken separately." In the instant case, adding a sixth scallop to Bradshaw '135 will not synergistically increase the benefit afforded by the scallops. In other words, adding a sixth flange will not provide an increased torque-generating benefit greater than the sum afforded by each scallop.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baughman US 5,680,953.

Baughman '953 teaches a plastic drum closure, comprising a threaded drum opening (21) and a plug (20), with a radial flange (69), an annular axially protruding projection (51), defining a groove (44) and gasket (61).

Baughman '953 does not teach the axial projection comprising a plurality of projections.

However, Examiner notes the projection could be formed of a plurality of projections without interfering with the proper function of the device. The groove (44) could still be formed despite the projection being formed of a plurality of projections. Furthermore, the gasket will still be properly secured, due to the presence of the annular wall (32).

It would have been obvious to one having ordinary skill in the art to form the annular projection of a plurality of projections. It has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

Furthermore, Examiner notes the claim is drawn to a drum closure "for a drum end" and notes the contact which limits the threaded advancement of the closure occurs between the claimed projections on the closing plug, and between the drum end, to which the closing plug is to be applied. In other words, the claimed threaded flange and closure plug must only meet all claimed structural limitations of the

Art Unit: 3727

instant invention, in order to be capable of being used in the intended manner. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

7. Claims 13-18 rejected under 35 U.S.C. 103(a) as being unpatentable over Ziegler et al. US 4,124,140 in view of Bradshaw et al. US 4,105,135.

Ziegler '140 teaches a threaded flange (26) for assembly into a drum end, a threaded closing plug (34), and a gasket (28).

Ziegler '140 does not teach a closure with a plurality of spaced-apart axially protruding projections.

Bradshaw '135 teaches a closure (1) with a plurality of spaced-apart axially protruding projections (8).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the closure cap of Bradshaw '135 on the closure of Ziegler '140, because such is an equivalent closure equally capable of sealing the drum opening.

Examiner notes applying the closure of Bradshaw '135 to the drum opening of Ziegler '140, perhaps in the embodiment of figures 8-9, will result in a connection between the axially-protruding projections and the drum end, while simultaneously compressing gasket (28). Comparing between Ziegler '140, figure 8, and Bradshaw '135, figure 4, it can be seen that the neck end of Bradshaw '135 is flared conically downwardly and outwardly from the neck opening, while the neck of Ziegler '140 extends outwardly horizontally, making it likely the axial projections (8) of Bradshaw '135 will contact the drum end.

Furthermore, examiner notes the claim is drawn to a drum closure "for a drum end" and notes the contact which limits the threaded advancement of the closure occurs between the claimed projections on the closing plug, and between the drum end, to which the closing plug is to be applied. In other words, the claimed threaded flange and closure plug must only meet all claimed structural limitations of the

Art Unit: 3727

instant invention, in order to be capable of being used in the intended manner. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Regarding claims 14-18, Bradshaw '135 does not teach the radial flange having a modified hex-shape, or further having six projections. However, Bradshaw '135 does teach in col. 1, lines 38-42, the downwardly deformed scallops (8) are provided as actuating surfaces for the application of torque by hand engagement.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the closure of Bradshaw '135, providing six projections, motivated by the benefit of increasing the number of points whereby a hand may engage the plug to provide opening torque.

Furthermore, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. The decision notes, "Combination cannot be patented unless it is synergistic, that is, results in effect greater than sum of several effects taken separately." In the instant case, adding a sixth scallop to Bradshaw '135 will not synergistically increase the benefit afforded by the scallops. In other words, adding a sixth flange will not provide an increased torque-generating benefit greater than the sum afforded by each scallop.

Response to Arguments

8. Applicant's arguments filed 30 September 2005 have been fully considered but they are not persuasive.

Regarding the rejection of claim 1 in view of Bradshaw et al. US 4,105,135, Examiner notes the claim is drawn to the closing plug "for receipt by" a threaded flange (emphasis added). Therefore, in order to anticipate the claim, a reference need only disclose all claimed structure of the apparatus, and, be capable of performing the intended use, i.e. limiting the threaded advancement of the plug by abutment of one or more of the plurality of axially-protruding projections against a surface of the drum end. In this case, the closing plug of Bradshaw '135 could be applied to another threaded flange, such as

Art Unit: 3727

that of Baughman US 5,971,189, whereby the projections would abut a surface of the drum end. In fact, it can be clearly seen in the cover figure of the Baughman '189 patent that a similarly-dimensioned axial projection abuts a drum surface, and prevents advancement. Therefore, it is the Examiner's position that the plug of Bradshaw '135 is capable of being used in the intended manner. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Regarding the rejection of claim 13 over Baughman US 5,680,953, Examiner notes the wall (56) merely serves to enclose the gasket, by defining groove (44). Wall (32) provides tamper protection by preventing access to the gasket. Therefore, the Examiner's position that the wall could be formed of separate, spaced elements, would be an obvious modification to one having ordinary skill in the art. It has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179. Furthermore, it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Examiner notes with regard to claim 13, the only structural difference between Baughman '953 and the claimed invention, is the segmenting of the plug flange. It is the Examiner's position that the instant invention is an obvious variant of the structure disclosed by Baughman '953, in view of patent law precedent and ordinary skill. Furthermore, Examiner notes the claim is drawn to a drum closure "for a drum end" and notes the contact which limits the threaded advancement of the closure occurs between the claimed projections on the closing plug, and between the drum end, to which the closing plug is to be applied. In other words, the claimed threaded flange and closure plug must only meet all claimed structural limitations of the instant invention, in order to be capable of being used in the intended manner. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Regarding the rejection of claim 13 over Ziegler et al. US 4, 124,140 in view of Bradshaw et al. US 4,105,135, Examiner asserts the plug of Bradshaw '135 could be applied to the drum of Ziegler '140

Art Unit: 3727

(or to the drum of Baughman '953) and function in the intended manner. Furthermore, Examiner notes the claim is drawn to a drum closure "for a drum end" and notes the contact which limits the threaded advancement of the closure occurs between the claimed projections on the closing plug, and between the drum end, to which the closing plug is to be applied. In other words, the claimed threaded flange and closure plug must only meet all claimed structural limitations of the instant invention, in order to be capable of being used in the intended manner. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to James N. Smalley whose telephone number is (571) 272-4547. The examiner can normally be reached on M-Th 9-6:30, Alternate Fri 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Newhouse can be reached on (571) 272-4544. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3727

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jns



NATHAN J. NEWHOUSE
SUPERVISORY PATENT EXAMINER